

Rec'd PCT/PTO 01 AUG 2005

(12) INTERNATIONAL PUBLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

10/544150

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
15 August 2002 (15.08.2002)

PCT

(10) International Publication Number  
WO 02/062260 A3

(51) International Patent Classification<sup>7</sup>: A61K 31/74

(21) International Application Number: PCT/US01/46841

(22) International Filing Date:  
8 November 2001 (08.11.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/246,689 8 November 2000 (08.11.2000) US  
60/246,707 8 November 2000 (08.11.2000) US  
60/246,708 8 November 2000 (08.11.2000) US  
60/246,709 8 November 2000 (08.11.2000) US

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*):  
BIO-CONCEPT LABORATORIES [US/US]; Suite  
101, 4 Tinkham Avenue, Derry, NH 03038 (US).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): SMITH, Francis,  
Xavier [US/US]; 22 Fox Run Lane, Salem, NH 03079  
(US).

(74) Agent: BLANK, Christopher, E.; Jaeckle Fleischmann  
& Mugel, LLP, 39 State Street, Rochester, NY 14614-1310  
(US).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
17 October 2002

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: IMPROVED OPHTHALMIC AND CONTACT LENS SOLUTIONS CONTAINING FORMS OF VITAMIN B

(57) Abstract: The present invention relates to improved ophthalmic solutions that employ select B vitamins; pyridoxine and its salts; and thiamine and its salts in order to more effectively preserve solutions and to reduce the degree to which cationic preservatives will deposit on contact lenses. Ophthalmic solutions are here understood to include contact lens treatment solutions, such as cleaners, soaking solutions, conditioning solutions and lens storage solutions, as well as wetting solutions and in-eye solutions for treatment of eye conditions.

WO 02/062260 A3

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/46841

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 31/74

US CL : 424/78.04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 424/78.04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A         | US 6,121,327 A (TSUZUKI ET AL) 19 September 2000, (10.09.00), see entire document. | 1-7                   |

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

|   |  |
|---|--|
| * Special categories of cited documents:  | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  |
| "A" document defining the general state of the art which is not considered to be of particular relevance  | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone   |
| "E" earlier document published on or after the international filing date  | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "A" document member of the same patent family  |
| "O" document referring to an oral disclosure, use, exhibition or other means  |  |
| "P" document published prior to the international filing date but later than the priority date claimed  |  |

|   |  |
|---|--|
| Date of the actual completion of the international search<br>09 JULY 2002   | Date of mailing of the international search report<br>22 AUG 2002  |
| Name and mailing address of the ISA/US<br>Commissioner of Patents and Trademarks<br>Box PCT<br>Washington, D.C. 20231<br>Facsimile No. (703) 305-3230 | Authorized officer<br><i>Valerie J. Bell-Harris for</i><br>CARLOS AZPURU<br>Telephone No. (703) 308-1235 |